



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/732,745

12/11/2003

Esa Malkamaki

47092.00064

6526

32294 7590 07/10/2007  
SQUIRE, SANDERS & DEMPSEY L.L.P.  
14TH FLOOR  
8000 TOWERS CRESCENT  
TYSONS CORNER, VA 22182

EXAMINER

RIZK, SAMIR WADIE

ART UNIT

PAPER NUMBER

2112

MAIL DATE

DELIVERY MODE

07/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Office Action Summary</b></p>	Application No. 10/732,745	Applicant(s) MALKAMAKI ET AL.	
	Examiner Sam Rizk	Art Unit 2112	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 April 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***DETAILED ACTIONS***

- Claims 1-30 have been submitted for examination
- Claims 31-36 have been cancelled
- Claims 1-30 have been rejected

***Response to Arguments***

1. Applicant's arguments with respect to claims 1, 16, 23, 28, 29 and 30 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Objections***

2. Applicant in page 12, line 9 of the arguments/remarks filed on 4/9/2007 refers to claim 37. The Examiner notes that claim 37 has not been submitted for examination.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 7-17, 21-23 and 25-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Laroia et al. US publication no. 2004/0228320 (Hereinafter Laroia).
4. In regard to claim 1, Laroia teaches:
  - (Currently Amended) A method comprising:

- providing a set of predetermined sequences of redundancy parameters;

(Note: Figure 5, reference characters (512), (514), (516), (518) and (519) in Laroia)

- selecting at least one of said set of predetermined sequences; and

(Note: Figure 5, reference characters (420), (520), (528) in Laroia)

- transmitting information indicating the selected at least one sequence to said-a terminal device to provide said redundancy parameters for an automatic repeat request processing at said terminal device.

(Note: Figure 6, reference characters (526) and (530) in Laroia)

Detailed teaching is included in sections [0078] – [0080] in Laroia.

5. In regard to claim 2, Laroia teaches:

- (Currently Amended) The method according to claim 1, further comprising;
- providing said information comprising at least one of an index and a pointer to said selected at least one predetermined sequence.

(Note: Figure 7, reference character (700) and section [0050] in Laroia)

6. In regard to claim 7, Laroia teaches:

- (Currently Amended) The method according to claim 1, wherein said transmitting of said information is performed at a beginning of a connection.

(Note: Figure 12, reference characters (1208), (1258), (1264) and (1266) in Laroia)

7. In regard to claim 8, Laroia teaches:

- (Currently Amended) The method according to claim 1, wherein, in said providing of said set of predetermined sequences, said set of predetermined sequences comprises a predefined fixed set.

(Note: Figure 5, reference characters (512), (514), (516), (518) and (519) in Laroia)

8. In regard to claim 9, Laroia teaches:

- (Currently Amended) The method according to claim 1, wherein, in said providing of said set of predetermined sequences, said redundancy parameters comprise a first parameter defining a self-decodable redundancy version and a second parameter defining bits which are to be punctured.

(Note: section [0077] in Laroia)

9. In regard to claim 10, Laroia teaches;

- (Currently Amended) The method according to claim 1, wherein, in said providing of said set of predetermined sequences, said set of predetermined sequences comprise sequences relating to at least one of a chase combining strategy, a partial incremental redundancy strategy, and a full incremental redundancy strategy.

(Note: section [0077] in Laroia)

10. Claim 11 is rejected for the same reasons as per claim 5.

11. In regard to claim 12, Laroia teaches:

- (Currently Amended) The method according to claim 1, wherein said transmission of said information is performed by broadcasting said information to substantially all terminal devices located within a predetermined area.

(Note: section [0021] in Laroia)

12. Claim 13 is rejected for the same reasons as per claim 12.

13. In regard to claim 14, Laroia teaches:

- (Currently Amended) The method according to claim 1, wherein transmitting of said information is performed via a wireless communication link.

(Note: Figure 1 in Laroia)

14. In regard to claim 15, Laroia teaches:

- (Currently Amended) The method according to claim 1, further comprising:
- performing said automatic repeat request processing for a data transmission on an enhanced uplink dedicated channel.

(Note: Figure 4, reference character (456) in Laroia)

15. Claims 16, 23, 28-30 are rejected for the same reasons as per claim 1.

16. In regard to claim 17, Laroia teaches:

Art Unit: 2112

- (Currently Amended) The terminal device according to claim 29, further comprising:
- a mobile terminal of a cellular communication network, operably connected to said receiver.

(Note: Figure 1, reference characters (110), (112), (118) and (120) in Laroia)

17. Claim 21 is rejected for the same reasons as per claim 9.

18. In regard to claim 22, Laroia teaches:

- (Currently Amended) The terminal device according to claim 29, further comprising:
- a storing unit, operably connected to said receiving means, configured to store a set of sequences of redundancy parameters and wherein said information comprises at least one of a pointer and an index to said stored set of sequences.

(Note: Figure 3, reference character (336) in Laroia)

19. Claim 25 is rejected for the same reasons as per claim 12.

20. Claim 26 is rejected for the same reasons as per claim 22.

21. Claim 27 is rejected for the same reasons as per claim 17.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2112

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

22. Claims 3-6, 18-20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laroia as applied to claim 1 above, and further in view of the Applicant Admitted Prior Art (Hereinafter AAPA)

23. In regard to claim 3, Laroia teaches substantially all the limitations in claim 1.

However, Laroia does not teach:

- (Currently Amended) The method according to claim 1, wherein transmitting of said information is performed by using a higher layer signaling.

The AAPA discloses:

- (Currently Amended) The method according to claim 1, wherein transmitting of said information is performed by using a higher layer signaling.

(Note: Section [0003], lines (5-6) in AAPA)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the AAPA that comprise detailed



enhancements for uplink packet data of Wideband Code Division Multiple Access (WCDMA) systems cover radio transmission of data from a mobile unit or mobile terminal, called User Equipment (UE) in third generation terminology, to a fixed station, called Node B in third generation terminology. Here, the case of erroneous reception of data packets is handled by Radio Link Control (RLC) signaling. This is disadvantageous in that a retransmission will require relatively large buffers and will introduce significant delays. One of the technologies under investigation in connection with enhanced uplink data is fast H-ARQ, where the packet retransmissions are handled at either physical layer or Media Access Control (MAC) layer and thus in principle at the Node B instead of the Radio Network Controller (RNC). This will significantly reduce the retransmission delay, allowing for more aggressive settings of the Block Error Rate (BLER) targets for the transmissions from the UE, which leads to a potential gain in uplink capacity through reduced signal-to-noise ( $E_b/N_0$ ) requirements with the teaching of Laroia..

This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized the need to support the standardization phase of the High Speed Downlink Packet Access (HSDPA).

24. In regard to claim 4, AAPA discloses:

Art Unit: 2112

- (Currently Amended) The method according to claim 3, wherein, in said transmitting of said information, said higher layer signaling comprises Radio Resource Control signaling.

(Note: Section [0003], lines (5-6) in AAPA)

25. In regard to claim 5, Laroia teaches:

- (Currently Amended) The method according to claim 3, further comprising:
- using an outband signaling for notifying about redundancy parameters used from said selected at least one sequence.

(Note: Figure 4 in Laroia)

26. In regard to claim 6, Laroia teaches:

- (Currently Amended) The method according to claim 5, wherein, in said using of said outband signaling, the amount of said outband signaling is made dependent from said selected at least one sequence.

(Note: Figure 7 in Laroia)

27. Claim 18 is rejected for the same reasons as per claim 4.

28. Claims 19 and 24 are rejected for the same reasons as per claim 5.

29. Claim 20 is rejected for the same reasons as per claim 6.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Rizk whose telephone number is (571) 272-8191. The examiner can normally be reached on M-F 8-5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on (571) 272-6962. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

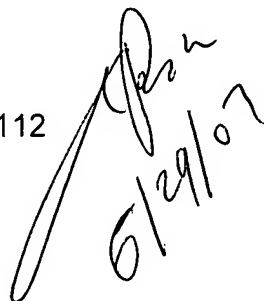
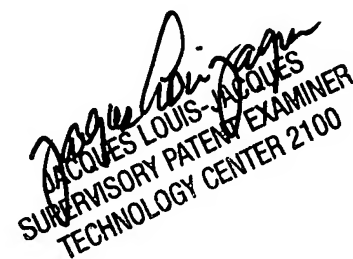
Art Unit: 2112

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronics Business Center (EBC) at 866-217-9197 (toll-free)

Sam Rizk,

Examiner

ART UNIT 2112

Handwritten signature of Sam Rizk and the date 6/29/07.Handwritten signature of Jacques Louis-Jacques and an official stamp that reads: JACQUES LOUIS-JACQUES, SUPERVISORY PATENT EXAMINER, TECHNOLOGY CENTER 2100.